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CROSSLINKING OF FLUORESCENT* PCS-101 AND OF POLYLYSINE IN AN EYE-DROP FORMULATION TO RABBIT CORNEA INVIVO

*FLUORESCENCE INTENSITY IN THE ORIGINAL SOLUTION IS 175 FOLD LOWER IN PCS-101 SOLUTION THAN IN POLYLYSINE SOLUTION

TIME AFTER LAST APPLICATION

1hr

36hrs

POLYLYSINE



FLUORESCENCE

Fig. 1A



BRIGHTFIELD

Fig. 1B

PCS-101



FLUORESCENCE

Fig. 1C



BRIGHTFIELD

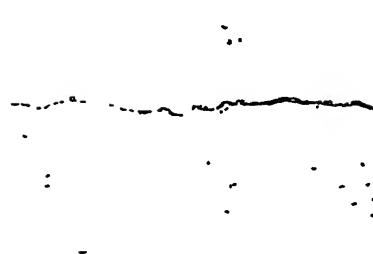
Fig. 1D

CONTROL:
VEHICLE



FLUORESCENCE

Fig. 1E



BRIGHTFIELD

Fig. 1F

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TIME COURSE OF 0.34 $\mu\text{g}/\mu\text{l}$ HA-POLYLYSINE-FITC CONJUGATE
BINDING TO HUMAN FINGER IN VIVO
WITH SAMPLE APPLIED BY RUBBING

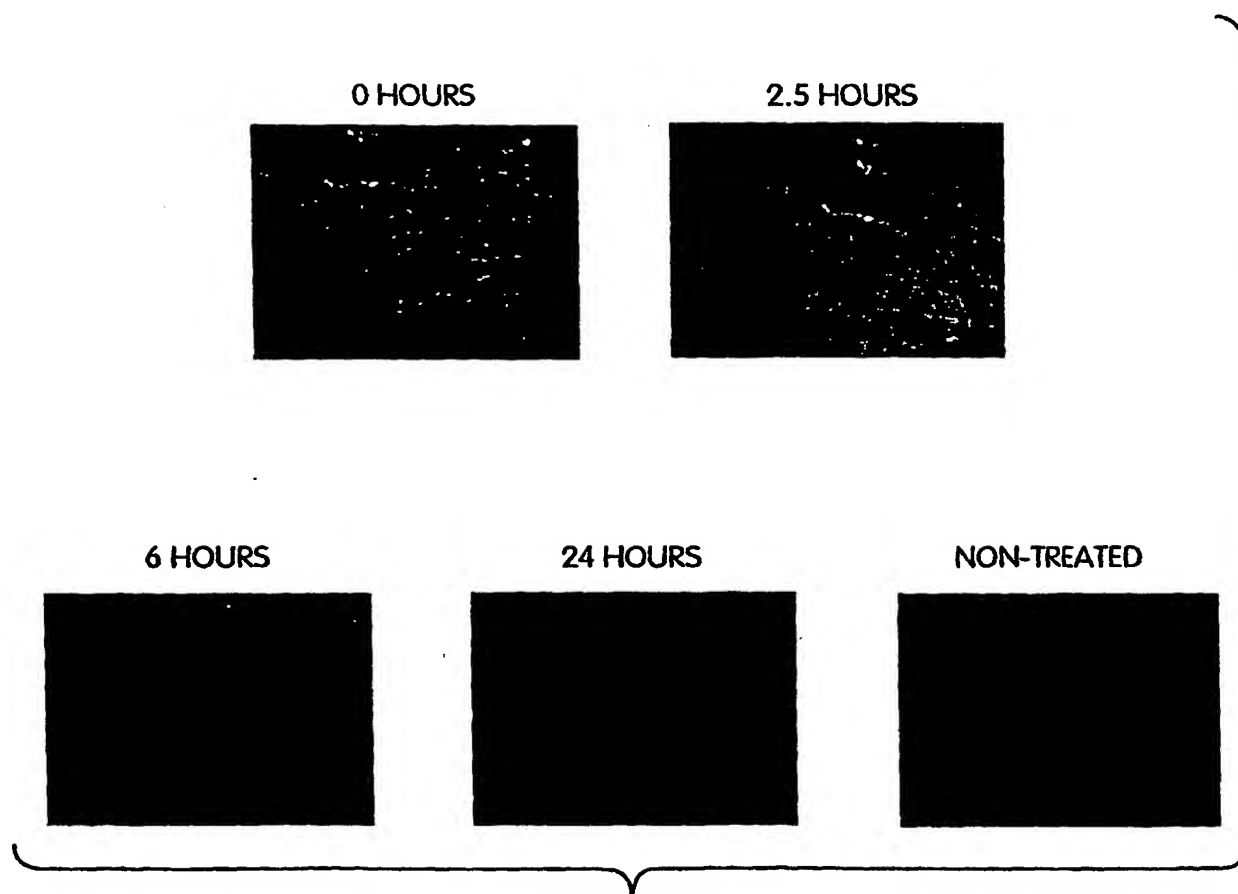


Fig. 2

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UPTAKE AFTER REPEATED APPLICATIONS OF PCS-101 TO RABBIT CORNEA
WITHOUT ADDED TRANSGLUTAMINASE

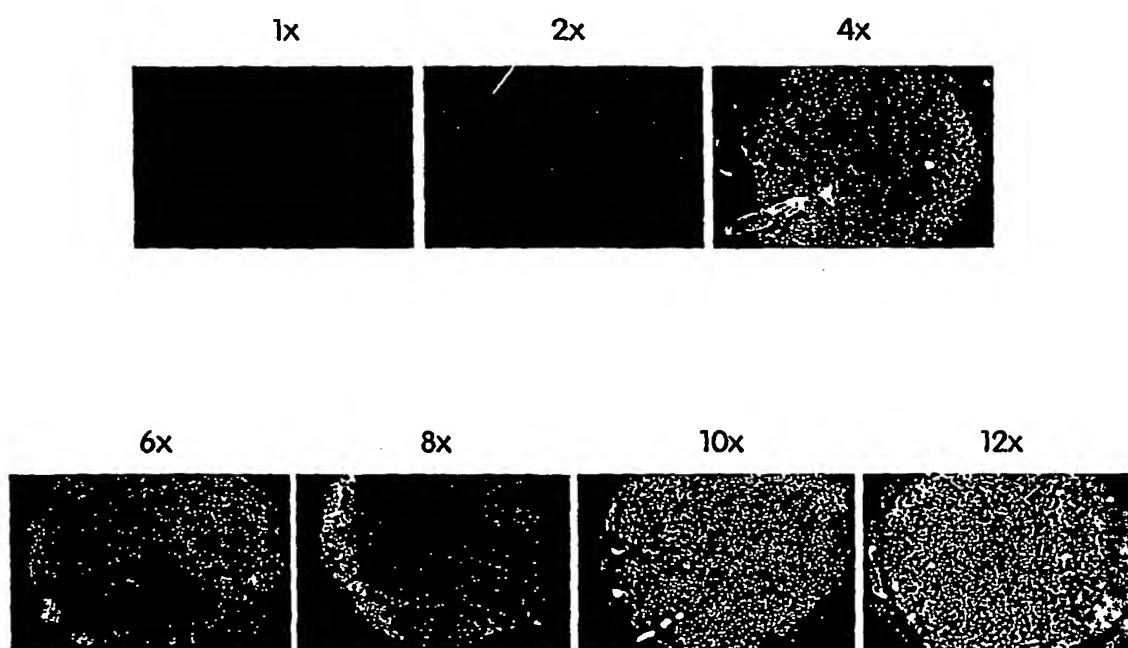


Fig. 3

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UPTAKE AFTER REPEATED APPLICATIONS OF PCS-101 TO RABBIT CORNEA
WITHOUT ADDED TRANSGLUTAMINASE

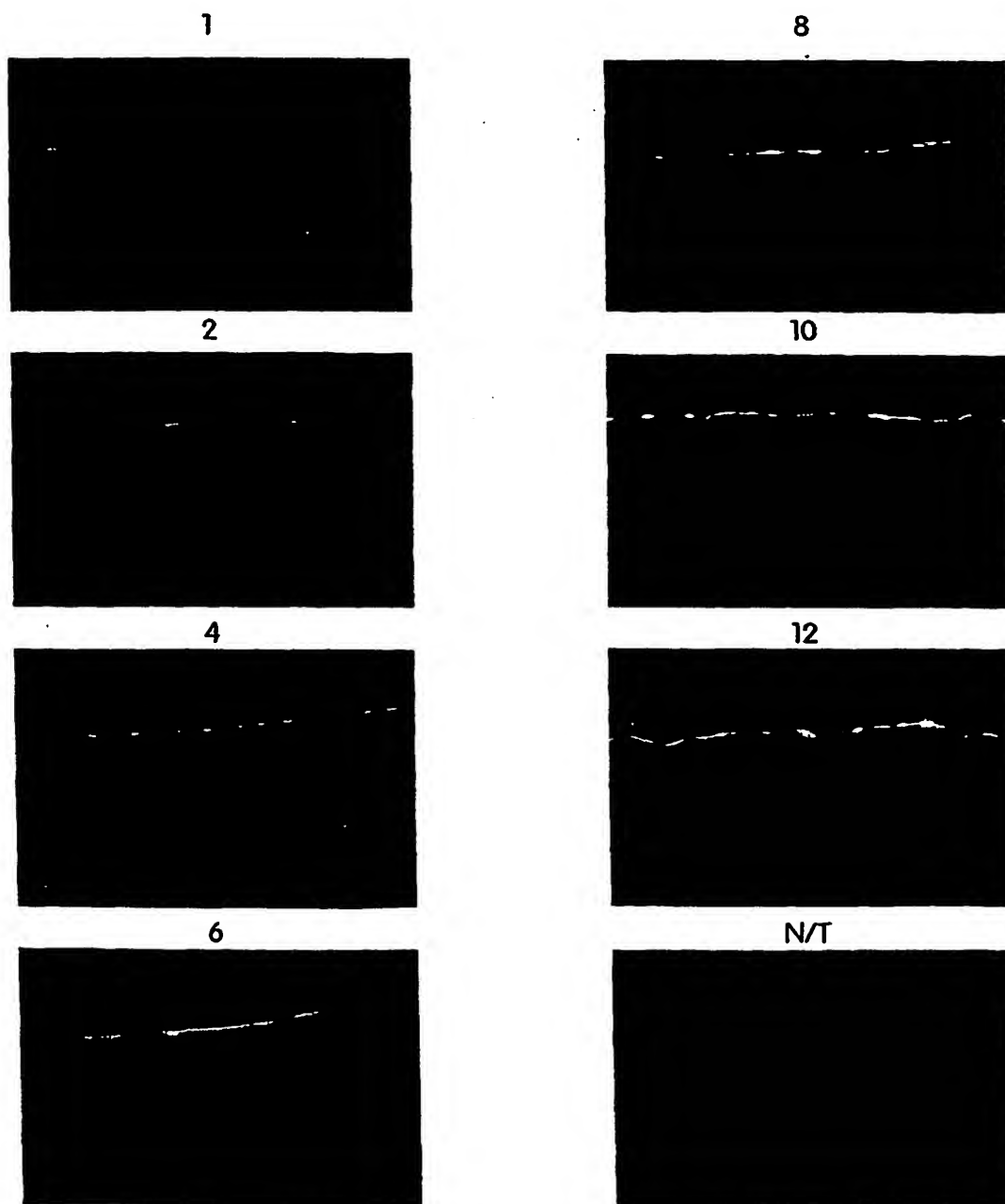


Fig. 4

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CROSSLINKING OF FLUORESCENT PCS-201 TO THE PIG PALATE
EPITHELIUM WITHOUT ADDED TRANSGLUTAMINASE AND ITS
INHIBITION BY EDTA

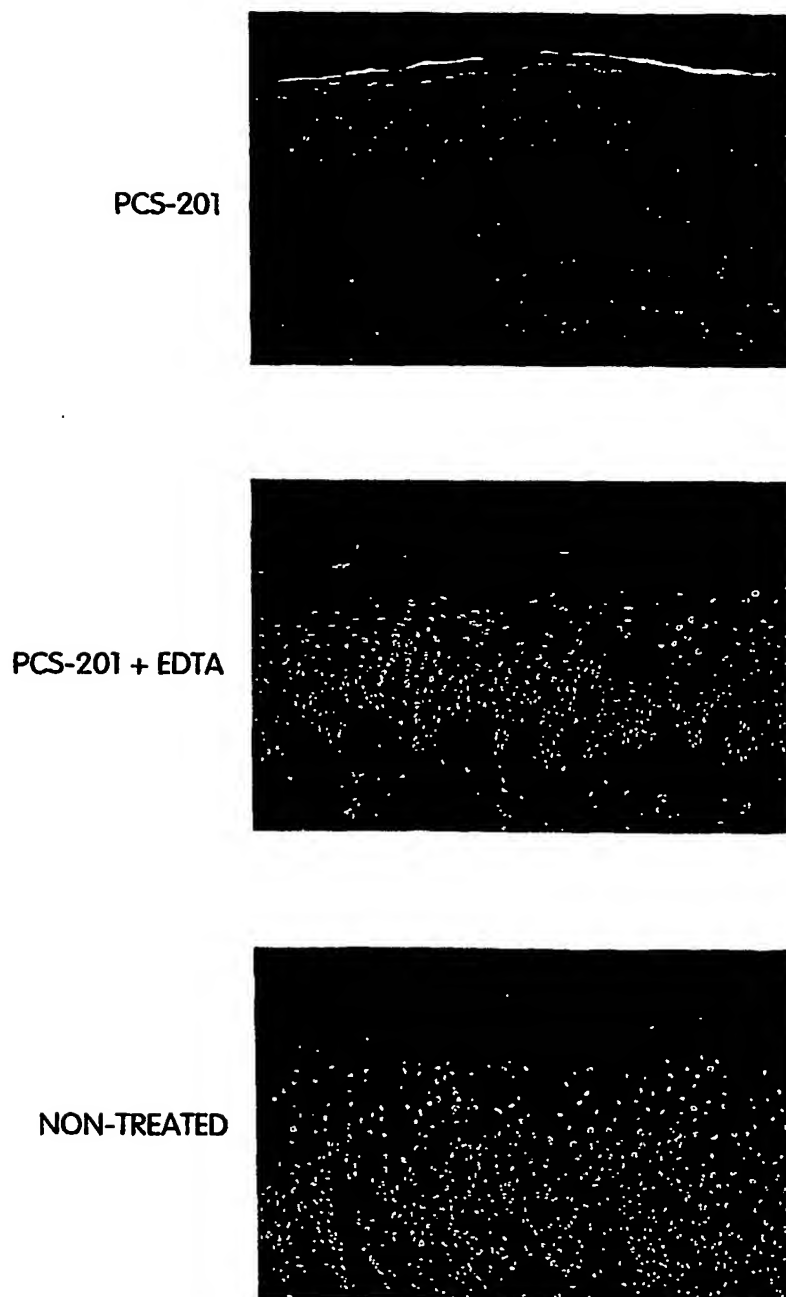
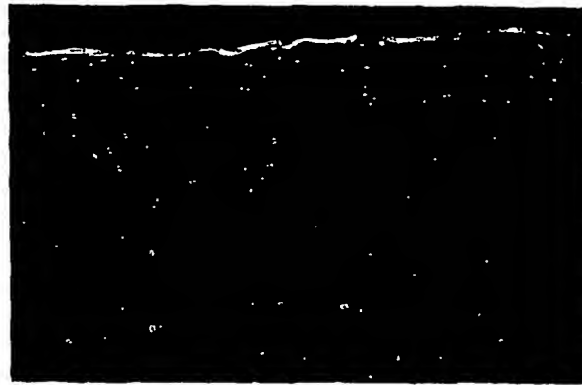


Fig. 5

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CROSSLINKING OF FLUORESCENT PCS-201 TO THE LOWER
SURFACE OF PIG TONGUE EPITHELIUM WITHOUT ADDED
TRANSGLUTAMINASE AND ITS INHIBITION BY EDTA

PCS-201



PCS-201 + EDTA



NON-TREATED

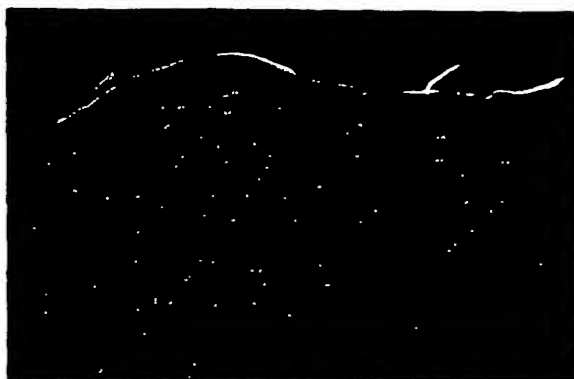


Fig. 6

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CROSSLINKING OF FLUORESCENT PCS-201 TO THE PIG GUM
EPITHELIUM WITHOUT ADDED TRANSGLUTAMINASE AND ITS
INHIBITION BY EDTA

PCS-201



PCS-201 + EDTA



NON-TREATED



Fig. 7

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CROSSLINKING OF FLUORESCENT PCS-201 TO THE PIG TONGUE AND GUM EPITHELIA
WITHIN 30 SECONDS OF APPLICATION WITHOUT ADDED TRANSGLUTAMINASE

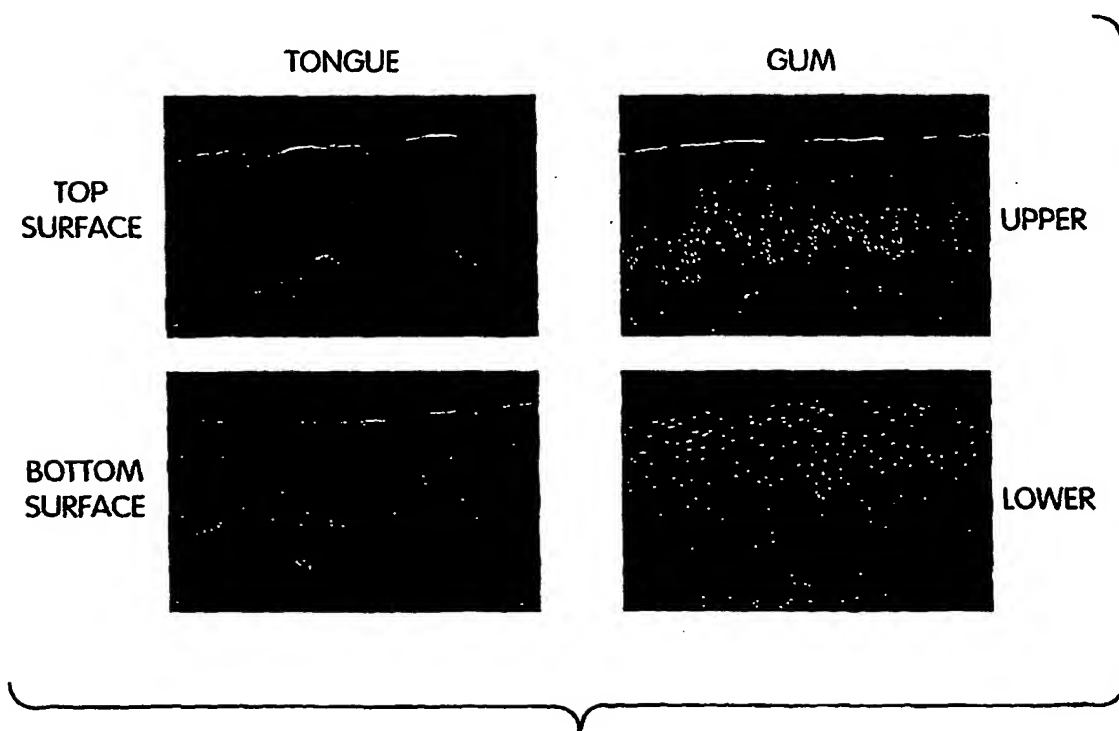


Fig. 8

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CROSSLINKING OF FLUORESCENT PCS-201 TO THE PIG PALATE, GUM AND
TONGUE EPITHELIA WITHIN 30 SECONDS OF APPLICATION
WITHOUT ADDED TRANSGLUTAMINASE

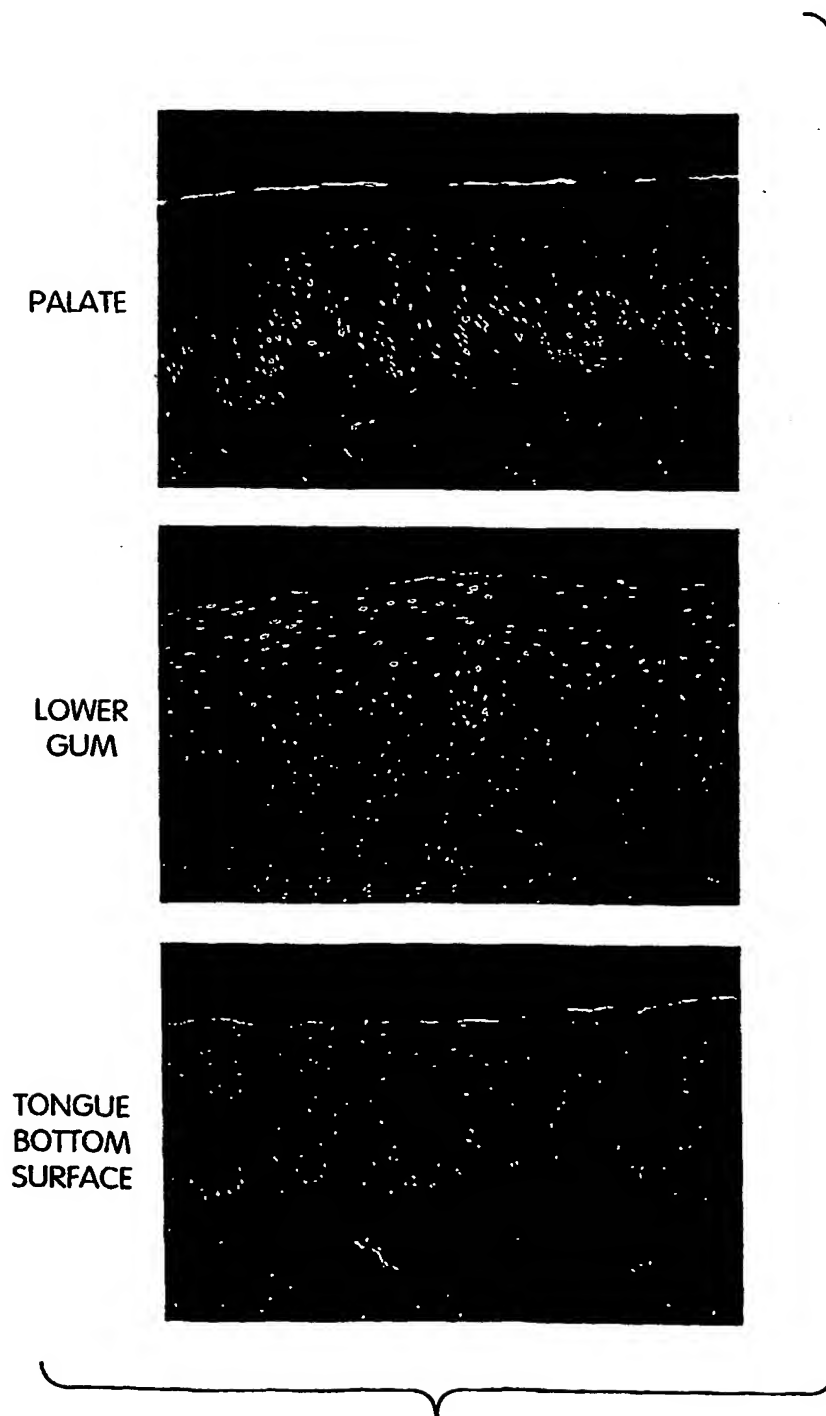


Fig. 9

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CROSSLINKING OF FLUORESCENT PCS-201 TO THE PIG PALATE EPITHELIUM
WITHIN 30 SECONDS OF APPLICATION WITHOUT ADDED TRANSGLUTAMINASE



Fig. 10

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CROSSLINKING OF FLUORESCENT* PCS-201 AND OF POLYLYSINE TO THE INNER
LINING OF PIG AORTAS WITHOUT ADDED TRANSGLUTAMINASE

* FLUORESCENCE INTENSITY IN THE ORIGINAL SOLUTION IS 17 FOLD
LOWER IN THE PCS-201 SOLUTION THAN IN POLYLYSINE SOLUTION

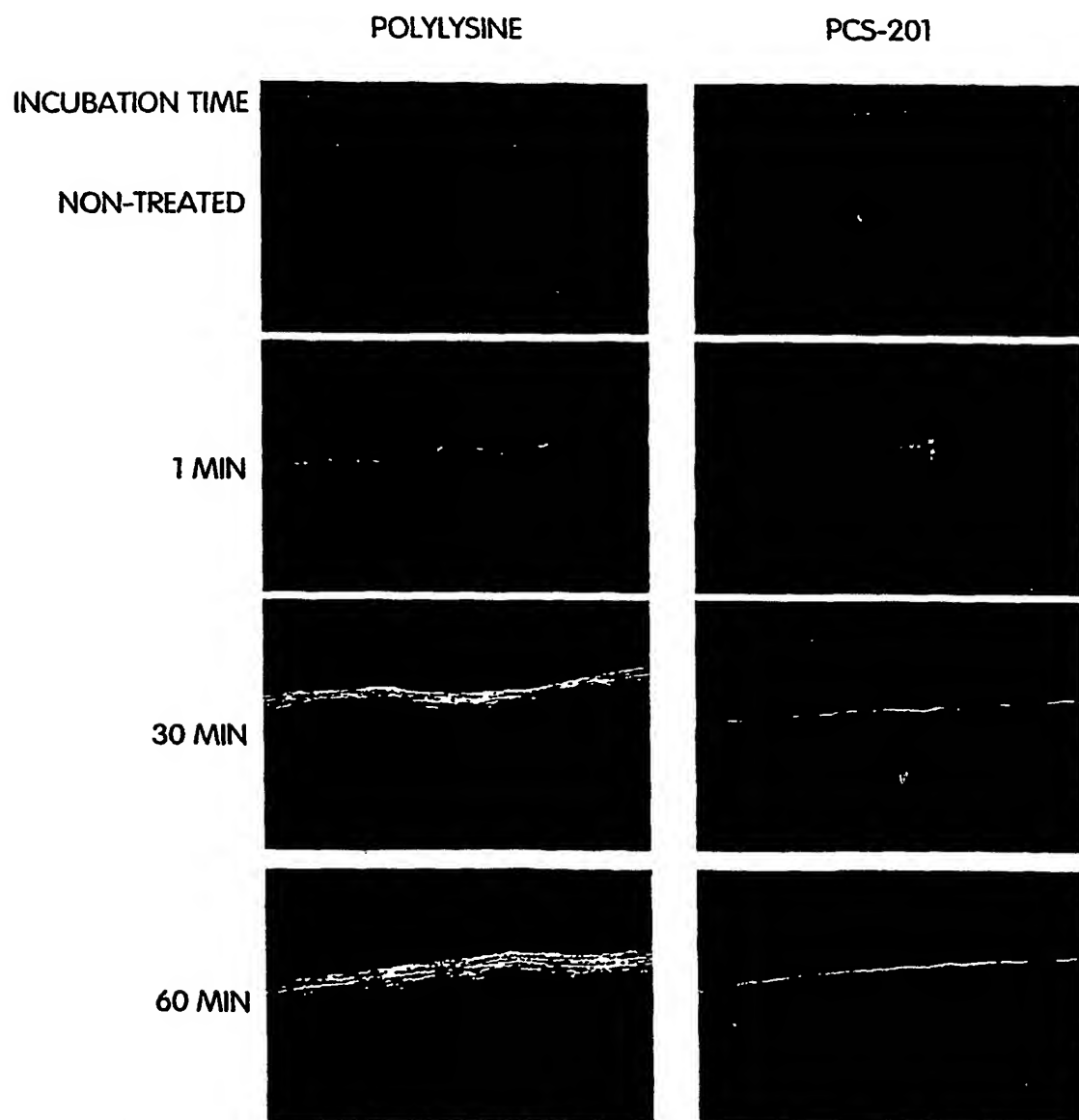


Fig. 11

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EFFECT OF NaCl CONCENTRATION ON COUPLING OF HYALURONIC ACID-POLYLYSINE-FITC
TO THE CORNIFIED LAYER OF RABBIT CORNEA WITHOUT ADDED TRANSGLUTAMINASE

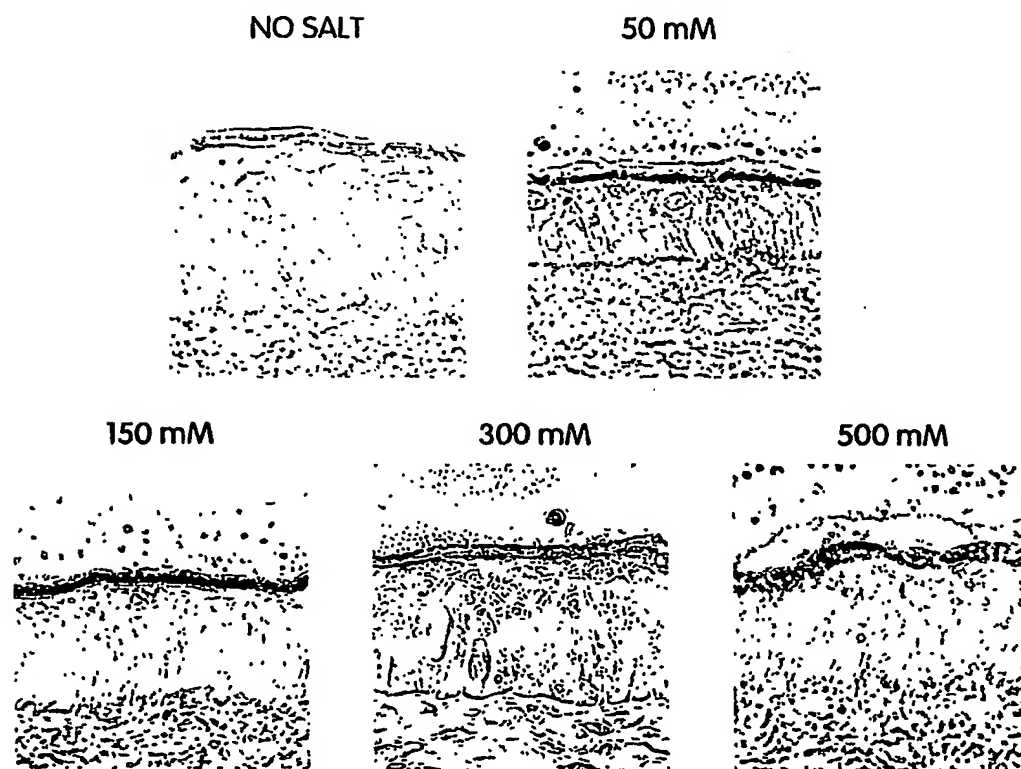


Fig. 12

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CROSSLINKING OF PCS-101 (HA-FITC CONJUGATED TO PLL-TRITC)
TO RABBIT CORNEA WITHOUT ADDED TRANSGLUTAMINASE
AND COMPAIED TO HA-FITC AND PLL-TRITC

UPTAKE AFTER SIX REPEATED APPLICATIONS
INCUBATION TIME OF EACH APPLICATION WAS 1 MINUTE

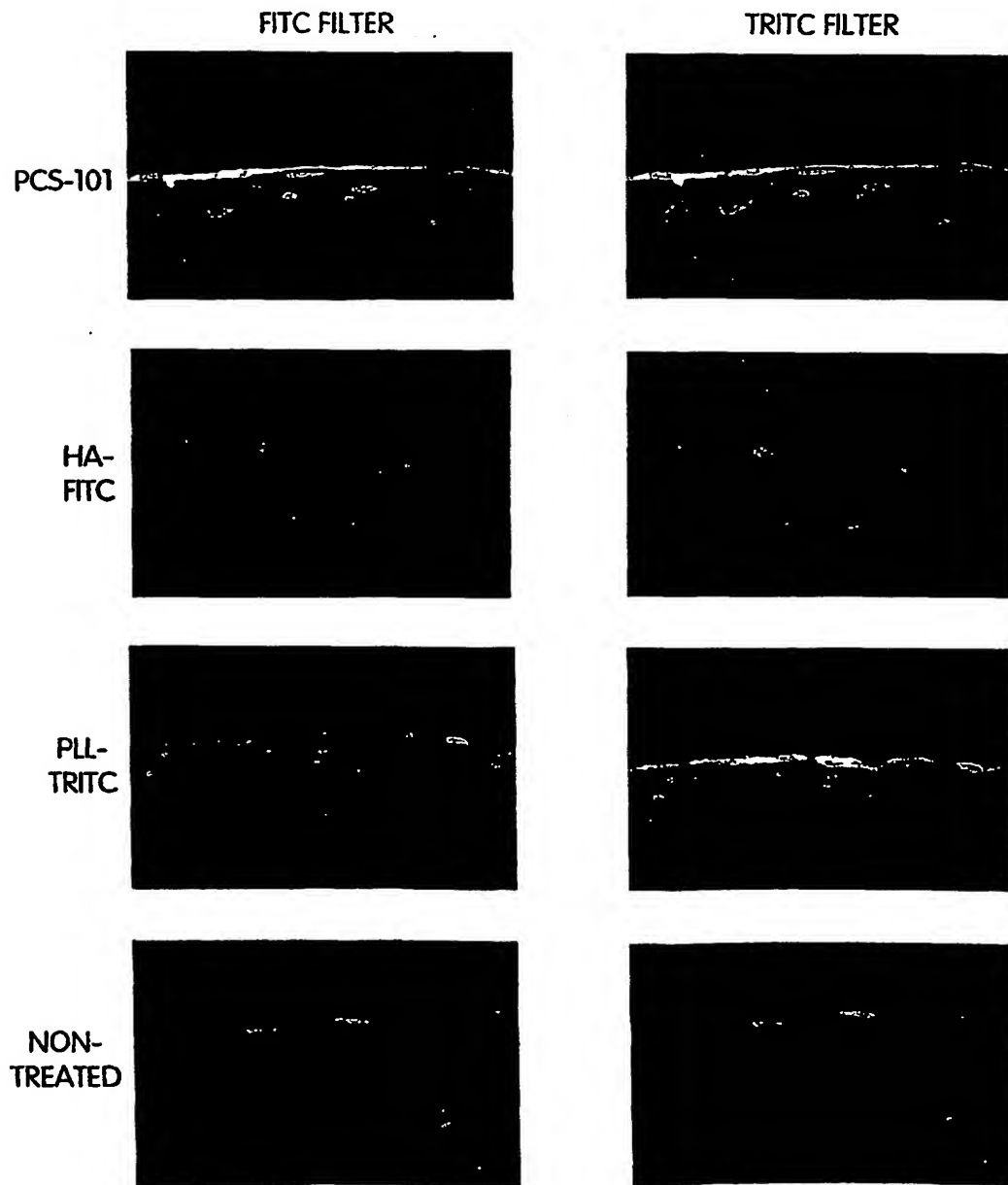


Fig. 13

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COMPARISON OF BINDING OF PCS-101 VS. FREE HA TO RABBIT CORNEA

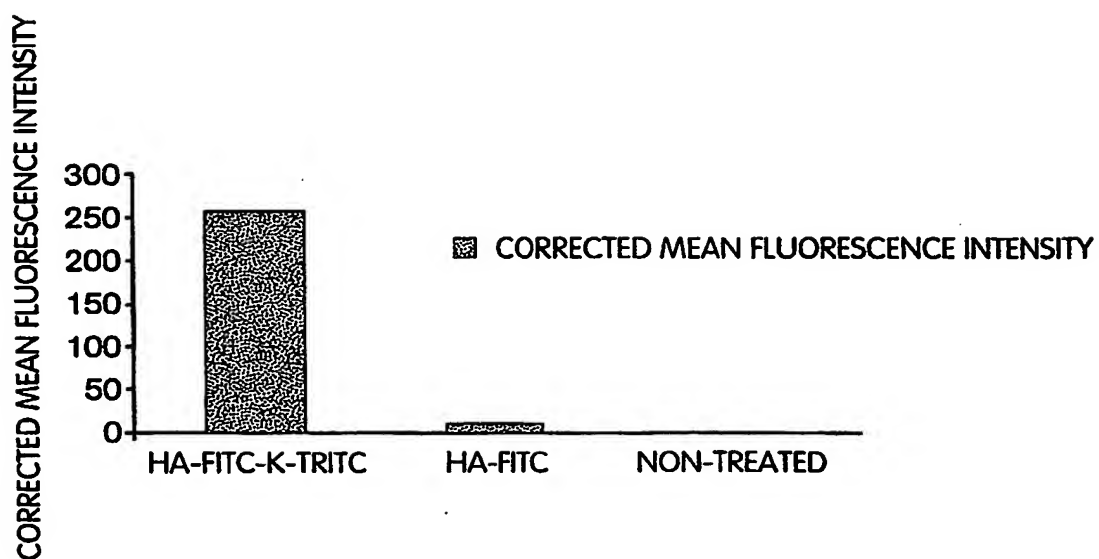


Fig. 14

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